

Upgrading the UK to Digital Phone Lines

The Alarm Industry

Whether at work or at home, alarms play a crucial role in how we keep ourselves and our loved ones safe, providing both security and peace of mind. There are two main types of alarm - Intruder alarms and Fire alarms – and each of these types can be further divided into either ‘monitored’ or ‘unmonitored’.

‘Unmonitored’ alarms activate when triggered and produce an alert, usually in the form of a siren. In the case of a Fire alarm, this acts as a prompt to evacuate the building.

‘Monitored’ alarms are connected to, and monitored by, Alarm Receiver Centres (ARCs). ARCs are responsible for responding to activations from alarm systems. In the case of Intruder alarms, they’ll also contact a keyholder and the police, where a police response is part of the agreed service. For a response to be triggered, the police require alarm confirmation – this is when further evidence of an intrusion occurs, for example passing a further alarm signal, or audio or visual confirmation.

The monitoring technology usually works in one of two ways. Either it’s provided by a 3rd-party managed signalling provider, like BT Redcare or CSL, or sent directly to the ARC by a Digital Communicator as part of an on-site alarm system. Historically, the industry has relied upon analogue phone technology as a primary path. Managed services tend to use SIM technology as their primary path with the secondary path being dial up broadband. These will be affected by the move to Digital Phone Lines. Currently, there are reportedly over 1 million alarm systems in the UK using the analogue network, with an estimated 800,000 being Digital Communicators.

Potential issues with moving to Digital Phone Lines



The new router may require a battery back up or relocating to somewhere that provides more physical security



The provision of an Analogue Telephone Adapter (ATA) port on the router will be up to individual service providers



A loss of support for high speed Dual Tone Multi Frequency (DTMF) signalling



Some legacy products rely on all copper end-to-end connectivity and they’ll need to be withdrawn



Line cut monitoring will be affected by the loss of the 50v charge from copper lines



Existing monitored alarms systems may be left disconnected following an upgrade by the service provider at the customer site

For more information, visit www.bsia.co.uk, www.nsi.org.uk, www.ssaib.org, www.csl-group.com/uk or www.redcare.bt.com

Supply Chain

Hardware is manufactured by suppliers who sell to alarm installers, either directly or through distributors. Installers then contract the monitoring to ARCs, who either monitor the alarm directly or buy a managed service from signalling providers.

Key Stakeholders

There are approx. 2000 Alarm installers and 75+ different companies that run ARCs, with the primary signalling providers being BT Redcare and CSL.

There’s also an industry body, the BSIA, and two accredited industry certification bodies - NSI and SSAIB.

Hardware Providers

The main hardware providers are:

- Eaton
- Honeywell
- Pyronix
- Risco Group
- Siemens
- Texcom